

# Wet Microburst: Student Training and Role in On-line Bibliography and Event Selection



Patrick C. Pyle, Scott F. Blair
Atmospheric Science Majors





# **Bibliographic Base**

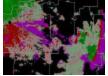


- Collected from 34 papers and NWS partners
- Organized into an Excel spreadsheet
- · Aid in the understanding of microburst
- · Essential for empirical conceptual model

#### Web Base

- Acquired through keyword search "microburst"
- 500+ websites investigated, 155 used in the project Operationally useful summary of each websit

## **Velocity Identification**



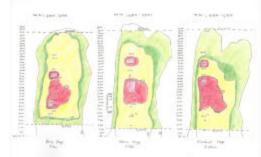
"Convergence" June 23, 2003 Clarendon, AR



"Divergence" August 18, 2003 Little Rock, AR

- Collected from 34 journal articles
- · Organized into an Excel spreadsheet
- Further summarization of microburst related

## **Empirical Storm-Scale Model**



Five event days collected from NWS partners RHI radar schematic used to prepare its morphology Three stages contained within a one hour period Max core defined as 60-65dBZ Convergence indicated during mature stage

#### **Empirical Conceptual Model**



May 15 - September 15 All ranges developed from parameter base

### Composite Wet Microburst Checklist

Developed from NWS: BMX, JAN, LIX, MOB, SHV Key parameters selected from composite

#### **Thermodynamics**

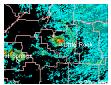
SBCAPE	(5/5)
PW	(3/5)

(3/5)

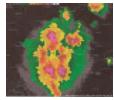
H85-H5 T Lapse Rate (3/5) **Kinematics** 

0-6km Shear (3/5)

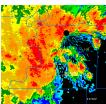
## The Microburst Family



"Isolated Cell" August 18, 2003 Little Rock, AR



"Multi-Cell" June 4, 2002 Ragland, AL



"Bow Echo" July 22, 2003 Memphis, TN

#### **Acknowledgements**

Dr. Paul J. Croft, ULM ATMS Associate Professor COMET

NWS Partners: BMX, JAN, LIT, MOB, SHV, MEG ULM Department of Geosciences